



9-23-04

IFW

MTC 2002.1
(37-21(53264)B)
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Muhammad Anzar et al.
Serial No. 10/811,593
Filed March 29, 2004
Confirmation No. 2857
For PROCESS FOR THE STAINING OF SPERM

Art Unit 1651

September 22, 2004

COMMISSIONER FOR PATENTS
P.O. BOX 1450
ALEXANDRIA, VIRGINIA 22313-1450

SIR:

INFORMATION DISCLOSURE STATEMENT

In accordance with 37 C.F.R. 1.97 and 1.98 and MPEP 609, and in compliance with the duty of disclosure set forth in 37 C.F.R. 1.56, applicants submit copies of the references listed on the attached PTO/SB/08A for consideration by the Patent and Trademark Office in the above-entitled application and to be made of record therein.

This Information Disclosure Statement is being submitted pursuant to 37 C.F.R. 1.97(b) in that applicants believe that it is being filed before the mailing date of the first Office action on the merits. Accordingly, neither a statement nor fee under 37 C.F.R. 1.97(c) is required. If applicants are mistaken, and the mailing date of the first Office action on the merits precedes the filing of this Information Disclosure Statement, Applicant authorizes the Commissioner to charge the fee due under 37 C.F.R. 1.17(p) to Deposit Account No. 19-1345.

Respectfully submitted,

Timothy B. McBride, Reg. No. 47,781
SENNIGER POWERS
One Metropolitan Square, 16th Floor
St. Louis, Missouri 63102
(314) 231-5400

TBM/sxm

Express Mail Label No. EV 544920774 US
Mail Stop Amendment

PTO/SB/08A

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	10/811,593
Filing Date	March 29, 2004
Confirmation Number	2857
First Named Inventor	Muhammad Anzar et al.
Group Art Unit	1651
Examiner Name	TBD

Sheet

1

of

4

Attorney Docket No.

MTC 2002.1 (37-
21(53264)B)**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code ² (if known)		
	1	4,362,246		Adair	12-07-1982
	2	5,135,759	A	Johnson et al.	08-04-1992
	3	5,658,751	A	Yue et al.	08-19-1997
	4	5,798,276	A	Haugland et al.	08-25-1998
	5	5,985,216	A	Rens et al.	11-16-1999
	6	6,071,689	A	Seidel et al.	06-06-2000
	7	6,130,034	A	Aitken	10-10-2000
	8	6,149,867	A	Seidel et al.	11-21-2000
	9	6,263,745	B1	Buchanan et al.	07-24-2001
	10	6,368,786	B1	Saint-Ramon et al.	04-08-2002
	11	6,372,422	A	Seidel et al.	04-16-2002
	12	6,395,305	B1	Buhr et al.	05-28-2002
	13	6,524,860	B1	Seidel et al.	02-25-2003
	14	2002/0119558	A1	Seidel et al.	08-29-2002

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached..

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/811,593
				Filing Date	March 29, 2004
				Confirmation Number	2857
				First Named Inventor	Muhammad Anzar et al.
				Group Art Unit	1651
				Examiner Name	TBD
Sheet	2	of	4	Attorney Docket No.	MTC 2002.1 (37-21(53264)B)

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ⁶
		Office	Number ⁴	Kind Code ² (if known)			
	15	GB	2145112	A	Milk Marketing Board	02-03-1985	
	16	WO	99/33956	A1	XY, Inc.	07-08-1999	
	17	WO	00/54026	A1	Hattings-KS	09-14-2000	
	18	WO	01/37655	A1	XY, Inc.	05-31-2001	
	19	WO	01/51612	A	Istituto Sperimentale Italiano	07-19-2001	
	20	WO	02/41906	A2	Pharmacia Corporation	05-30-2002	
	21	WO	02/043574	A3	Seidel et al.	06-06-2002	
OTHER ART - NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.					T ⁶
	22	Arndt-Jovin et al., "Analysis and Sorting of Living Cells According to Deoxyribonucleic Acid Content," Jour. Histochem. and Cytochem., 1977, 25(7), pp. 585-589					
	23	D'Occhio, M., "Sexing of Sperm and Embryos: Use of Sexed Sperm in AI, IVF, ICSI and Graft," Animal Breeding Use of New Technologies, Chapter 19, pp. 247-264, Kinghorn, van der Werf and Ryan, Eds.,					
	24	Dresser et al., "Analyses of DNA Content of Living Spermatozoa Using Flow Cytometry Techniques," Jour. Reprod. and Fert., 1993, 93, pp. 357-365					
	25	Ericsson et al., "Flow Cytometric Evaluation of Cryopreserved Bovine Spermatozoa Processed Using a New Antibiotic Combination," Theriogenology, 1990, 33(6), pp. 1211-1220					
Examiner Signature					Date Considered		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached..

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/811,593
				Filing Date	March 29, 2004
				Confirmation Number	2857
				First Named Inventor	Muhammad Anzar et al.
				Group Art Unit	1651
				Examiner Name	TBD
Sheet	3	of	4	Attorney Docket No.	MTC 2002.1 (37-21(53264)B)

	26	Farrell et al., "Quantification of Bull Sperm Characteristics Measured by Computer-Assisted Sperm Analysis (CASA) and the Relationship of Fertility," Theriogenology, 1998, 49(4), pp. 871-879	
	27	Foote et al., "Motility and Fertility of Bull Sperm in Whole Milk Extender Containing Antioxidants," Animal Repro. Sci., 2002, 71(1-2), pp. 13-23	
	28	Garner et al., "Viability Assessment of Mammalian Sperm Using SYBR-14 and Propidium Iodide," Bio. of Reprod, 1995, 53, pp. 276-284	
	29	Gordon et al., "Genetic Transformation of Mouse Embryos by Microinjection of Purified DNA," Proc. Natl. Acad. Sci., 1980, 77(12), pp. 7380-7384	
	30	Guthrie et al., "Flow Cytometric Sperm Sorting: Effects of Varying laser Power on Embryo Development in Swine," Mol. Reprod. and Develop., 2002, 61(1), pp. 87-92	
	31	Johnson et al., "Modification of a Laser-Based Flow Cytometry for High-Resolution DNA Analysis of Mammalian Spermatozoa," Cytometry, 1986, 7, pp. 268-273	
	32	Johnson, L.A., "Sex Preselection in Swine: Altered Sex Ratios in Offspring following Surgical Insemination of Flow Sorted X- and Y-Bearing Sperm," Reprod. Dom. Anim., 1991, 26, pp. 309-314	
	33	Johnson, L.A., "Sex Preselection by Flow Cytometric Separation of X and Y Chromosome-Bearing Sperm Based on DNA Difference: A Review," Reproduction, Fertility and Development, 1995, 7(4), pp. 893-903	
	34	Johnson, L.A., "Advances in Gender Preselection in Swine," Jour. of Reprod. and Fert., Proceedings of the Fifth International Conference on Pig Reproduction, Suppl. 52, 1997, pp. 255-266	
	35	Johnson et al., "Enhanced Flow Cytometric Sorting of Mammalian X and Y Sperm: High Speed Sorting and Orienting Nozzle for Artificial Insemination," Theriogenology, 1998, 49(1), p. 361	
	36	Johnson et al., "Sex Preselection: High-Speed Flow Cytometric Sorting of X and Y Sperm for Maximum Efficiency," Theriogenology, 1999, 52, pp. 1323-1341	
	37	Johnson, L.A., "Sexing Mammalian Sperm for Production of Offspring: the state-of-the-art," Anim. Reprod. Sci., 2000, 60-61, pp. 93-107	
	38	Maxwell et al., "Chlortetracycline Analysis of Boar Spermatozoa After Incubation, Flow Cytometric Sorting, Cooling, or Cryopreservation," Mol. Reprod. and Develop., 46, 1997 pp. 408-418	
	39	Morell et al., "Sexing of Sperm by Flow Cytometry," The Veterinary Record, 1988, pp. 322-324	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/811,593
				Filing Date	March 29, 2004
				Confirmation Number	2857
				First Named Inventor	Muhammad Anzar et al.
				Group Art Unit	1651
				Examiner Name	TBD
Sheet	4	of	4	Attorney Docket No.	MTC 2002.1 (37-21(53264)B)

	40	Rath et al., "Production of Piglets Preselected for Sex Following In Vitro Fertilization with X and Y Chromosome-Bearing Spermatozoa Sorted by Flow Cytometry," Theriogenology, 1997, 47, pp. 795-800	
	41	Salisbury and Graves, "Substrate-free Epididymal-like Bovine Spermatozoa," J. Reprod. Fertil., 1963, 6, pp. 351-359	
	42	Seidel et al., "Artificial Insemination of Heifers with Cooled, Unfrozen Sexed Semen," Theriogenology, 1998 49(1), p. 365	
	43	Seidel et al., "Insemination of Heifers with Sexed Sperm," Theriogenology, 1999, 52, pp. 1407-1420	
	44	Seidel et al., "Insemination of Heifers with Sexed Frozen or Sexed Liquid Semen," Website www.cvmbs.colostate.edu , Abstract, June 3, 1999, 2 pages	
	45	International Search Report for PCT/US2004/009903 dated 08/16/2004	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached..

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.